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A small breeding colony of the Rock Pratincole *Glareola nuchalis liberiae* in Togo

by Robert A. Cheke

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There are 2 recognised races of the Rock Pratincole *Glareola nuchalis*. *G. n. nuchalis*, which has a white nuchal collar, occurs in eastern, central and southern Africa and its range meets that of the western race *G. n. liberiae*, distinguished by its rufous collar, in Cameroon (White 1965). Dekeyser (1951) recorded *G. n. liberiae* in Togo, but I am not aware of any documented breeding records of Rock Pratincoles in that country and little information has been published about this West African subspecies.

The colony in Togo, which I visited during the spring and early summer of 1979, was near Landa-Pozanda (9°31'N, 1°17'E) on the Kara river, southeast of Lama-Kara (9°33'N, 1°12'E). At the breeding site, the river was interrupted by an expanse of rock which stretched across the river bed, providing ample space for the birds except when the water level was very high. J. F. Walsh observed at least 8 Rock Pratincoles there on 18 April 1979, but I saw only 4 on 7 and 11 May. Five were present on 19 May and 6, all adults, on 26 May. The early morning and late evening were the usual times when the pratincoles flew to hawk for insects above the river or over the gallery forest fringing it. The crepuscular habits of the species were also noted by Brosset (1979), who associated this behaviour with diurnal variations in the timing of flights by their insect prey. When the pratincoles were feeding over the water at Landa-Pozanda they often accompanied other aerial plankton feeders such as Palm Swifts *Cypsiurus parvus*, White-rumped Swifts *Apus affinis* and Wire-tailed swallows *Hirundo smithii*; but above the trees their most common companions were Broad-billed Rollers *Eurystomus glaucurus*. During much of the day the pratincoles stood inactive on the rocks but when it was very hot they often squatted in crevices, frequently "gaping".

On 26 May a greeting display was observed after one bird returned from a flight and landed facing another adult bird. On landing, the newcomer immediately crouched submissively and uttered a trilling call while its mate stretched its body upwards so that its head was almost vertically above its feet. The birds then reversed these positions; while the arriving bird raised its head up again and stretched its neck to the vertical, so that its body profile was much more attenuated than usual, the other bird crouched by

lowering its head and neck below the horizontal but raised its tail and also made trilling calls. These calls were different from the usual warning cries. A photograph taken of this behaviour reveals that the nuchal collar of the arriving bird was flared into a fan so that at the back of its head the rufous patch was 3-4 times greater in size than usual. This flaring of the nuchal collar suggests that it is of importance in sexual displays and that it may be instrumental in maintaining subspeciation where the two races meet, although birds with intermediate collars are known (Snow 1978).

The breeding habits of *G. nuchalis* were described by Vincent (1945), who stated that no nests are made and that the eggs are laid in a slight hollow in a rock. C/2 is usual, although sometimes only one egg is laid. I was unable to locate any eggs at Landa-Pozanda but in June it became clear that one pair was holding a territory on an isolated strip of rock and that the other 2 pairs shared a larger expanse of rock close to the river's edge. One of these pairs always became very excited whenever I approached a large crevice between two rocks in this area. I once saw a pratincole enter this gap and later emerge from it but I was unable to reach far enough to determine whether or not it contained any eggs or young.

Only 3 pairs of pratincoles were seen and these 6 adults were alone on 3 July; but on the evening of 7 July they were accompanied by 4 fledglings, which could not fly but were well feathered. I had, possibly, overlooked them on my previous visit as their plumage is cryptic against the rocky background and Brosset (1979) illustrates this with a photograph of 2 juveniles hiding in a crevice. Bannerman (1951) described the young of *G. n. liberiae*, and I can only add that the bill and eyes of the Togo juveniles were wholly black, their legs dull orange. There was a grey wash on their breasts, a character also mentioned by Bannerman (1951), but White (1945) states that the breast feathers of juvenile *G. n. nuchalis* are fringed with buff.

The unusual manner in which the young are fed and their behaviour towards the adults has not been described. At 18.15 hours on 7 July, a juvenile with its head lowered ran very fast towards an adult, which had just returned from a flight, and collided with it at full speed. The young bird then pivoted in a semi-circle around the adult with its head buried in the latter's breast feathers. When the juvenile stopped moving it raised its head and the parent bird promptly passed it some food from its bill. On a second occasion after a similar series of movements, which presumably serve to stimulate the adult to regurgitate food from its crop, the parent dropped the food onto a rock from which the juvenile picked it up. Later, an adult returned from a feeding flight and landed about 5 m away from a young bird where it dropped some food on the rock surface before walking towards the juvenile. The latter charged at the adult as usual and pivoted in a half circle about it. The adult immediately dropped some more food which the young bird took at once. Next, the adult turned and walked towards where it had left the first morsel. The young bird eventually followed but did not locate the food until the adult pecked at it, whereupon the young bird helped itself. On some occasions the juveniles pestered the adults by pecking directly at their bills. Two of the 4 juveniles were being fed by one pair and the other 2 juveniles were apparently the progeny of the 2 other pairs, but it is also possible that some of these birds were acting as helpers.

On the evening of 10 July the juveniles were still unable to fly and at this

time there were still plenty of exposed rocks for them; but during the night the river level rose dramatically and the following morning most of the pratincoles' usual resting sites were submerged and they were forced to sit on the few remaining vantage points. It is very probable that if the river had risen in this fashion only a few days earlier, when the juveniles had been younger and more vulnerable, they would have perished. Brosset (1979) said that juvenile *G. nuchalis* can swim like ducklings, but at this site the force of the Kara river in full flood would have swept any bird to its death. All 10 birds were still alive on 15 July, the first date when I saw a young bird fly, and they were still present on 20 July, the last date when I visited the site. At least one bird was there on 26 October (J. F. Walsh).

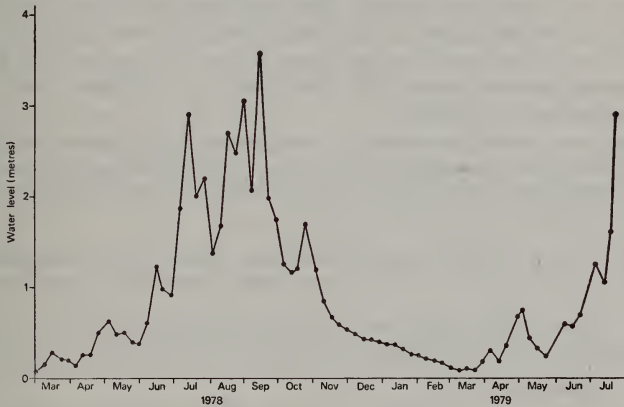


Fig. 1. The water level (metres) of the Kara River, taken weekly at Lama-Kara.

Fig. 1 shows weekly water level readings taken from March 1978 to July 1979 using a gauge in the Kara river at Lama-Kara, which is close to Landa-Pozanda. The birds evidently began breeding at a time when the river was beginning to rise (May–June), in contrast to some East African populations of *G. n. nuchalis* which complete breeding before the water levels start to rise (Benson & Irwin 1965). If a low water level, however, is the factor determining the timing of breeding then, according to Fig. 1, the birds would be expected to breed between December and April. Presumably, therefore, other influences are involved, and an increase in the availability of insect prey with the onset of the rains may be important. The ecology of *G. n. nuchalis* has been discussed by Brosset (1979) who described the results of 9 years' study of a colony in Gabon. Brosset concluded that at his site there were 2 breeding periods each year, both coinciding with dry seasons, and suggested that the visual stimulus of the re-appearance of rocks in the river provided the cue for the birds to start laying. Brosset also said that his birds were sedentary and that during the rainy seasons when their usual rocky haunts were submerged they became elusive and less visible by perching in trees. This observation contrasts with the views of Benson & Irwin (1965), who considered that the species was a regular migrant, an opinion supported by Tree (1969) and Elgood *et al.* (1973). The latter referred to Wells & Walsh (1969), who observed *G. nuchalis* on the Niger river at Borgou, in Nigeria,

only between 9 March and 1 September, during which time it was only common between late April and mid-July. This restricted period coincides with the time when the river was at its lowest, although ample rock space was available until mid-November (J. F. Walsh). Snow (1978) also states that these pratincoles breed when the rivers are at their lowest. However this was not the case in Togo, as the river was beginning to rise in March and it was very high in both 1978 and 1979 during July (Fig. 1), the month when the fledglings appeared. Thus the species' breeding can be a precarious process. The birds in Togo did not lay until the rains began, but then had to rear their fledglings before these rains had increased sufficiently to turn the river, at their site, into a torrent. However, it is possible that the young were a second brood or that the first clutches had failed and the birds consequently bred later than usual. Also if the birds are migrants they may be able to breed elsewhere, at other times of the year, and so have 2 breeding periods a year like the Gabon birds. The latter can, of course, benefit from 2 dry seasons without migrating.

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Larus relictus—a review

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Introduction

During an ornithological survey of wetlands in Mongolia in 1977 (Kitson 1978) I observed Relict Gulls *Larus relictus* at a new site. Much of the published material on this species proved difficult to obtain and to be predominantly in Russian. This review is intended to bring together in English the facts known about *Larus relictus*.

When Dwight wrote his monograph on the gulls of the world (1925), *Larus*